

PCT 10/553318

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference 17614.7-S1899-31-ne	FOR FURTHER ACTION	See item 4 below
International application No. PCT/EP2004/003945	International filing date (day/month/year) 15 April 2004 (15.04.2004)	Priority date (day/month/year) 15 April 2003 (15.04.2003)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant SSA SYSTEM-SPANN AG		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).
2. This REPORT consists of a total of 10 sheets, including this cover sheet.

In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

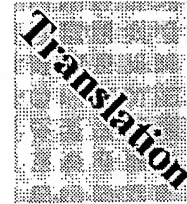
<input checked="" type="checkbox"/> Box No. I	Basis of the report
<input type="checkbox"/> Box No. II	Priority
<input checked="" type="checkbox"/> Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input checked="" type="checkbox"/> Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/> Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input checked="" type="checkbox"/> Box No. VI	Certain documents cited
<input type="checkbox"/> Box No. VII	Certain defects in the international application
<input type="checkbox"/> Box No. VIII	Certain observations on the international application
4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).

	Date of issuance of this report 02 March 2006 (02.03.2006)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer Agnes Wittmann-Regis
Facsimile No. +41 22 740 14 35	Telephone No. +41 22 338 89 70

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT



WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To:

Date of mailing
(day/month/year)

Applicant's or agent's file reference

17614.7-S1899-31-ne

FOR FURTHER ACTION

See paragraph 2 below

International application No.

PCT/EP2004/003945

International filing date (day/month/year)

15.04.2004

Priority date (day/month/year)

15.04.2003

International Patent Classification (IPC) or both national classification and IPC

Applicant

SSA SYSTEM-SPANN AG

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☒ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☒ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☒ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/EP

Authorized officer

Facsimile No.

Telephone No.

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/EP2004/003945

Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐

This opinion has been established on the basis of a translation from the original language into the following language

_____, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).

2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

☐

a sequence listing

☐

table(s) related to the sequence listing

b. format of material

☐

in written format

☐

in computer readable form

c. time of filing/furnishing

☐

contained in the international application as filed.

☐

filed together with the international application in computer readable form.

☐

furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/EP2004/003945

Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application

☒ claims Nos. 14, 15, 19-22

because:

☐ the said international application, or the said claims Nos. _____
relate to the following subject matter which does not require an international preliminary examination (*specify*):

☐ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. _____
are so unclear that no meaningful opinion could be formed (*specify*):

☐ the claims, or said claims Nos. _____ are so inadequately supported
by the description that no meaningful opinion could be formed.

☒ no international search report has been established for said claims Nos. 14, 15, 19-22

☐ the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that:

the written form

☐ has not been furnished

☐ does not comply with the standard

the computer readable form

☐ has not been furnished

☐ does not comply with the standard

☐ the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not comply with the technical requirements provided for in Annex C-bis of the Administrative Instructions.

☐ See Supplemental Box for further details.

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/EP2004/003945

Box No. IV Lack of unity of invention

1. ☒ In response to the invitation (Form PCT/ISA/206) to pay additional fees the applicant has:
- ☐ paid additional fees
- ☐ paid additional fees under protest
- ☒ not paid additional fees
2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose not to invite the applicant to pay additional fees.
3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is
- ☐ complied with
- ☒ not complied with for the following reasons:

See Supplemental Sheet

4. Consequently, this opinion has been established in respect of the following parts of the international application:
- ☐ all parts
- ☒ the parts relating to claims Nos. 1-13, 16-18

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/EP2004/003945

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-13, 16-18	YES
	Claims		NO
Inventive step (IS)	Claims	1-13, 16-18	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-13, 16-18	YES
	Claims		NO

2. Citations and explanations:

Cited documents:

D1: DE 202 19 340 U1

The subject-matter of the independent claims 1 and 4 is novel and inventive.

D1 (see fig. 1) discloses the closest prior art for claims 1 and 4, wherein a quick-action cylinder has a conical recess (12) which serves for the controlled guidance of the feed nipple. However, this conical recess does not act with conical bevels on the front side of the feed nipple, as is defined in the present claim 1.

A person skilled in the art will not find in the prior art any indication about the inclination of the front side of the feed nipple known from D1 so that the inclined conical bevels interact in the stressed state with a conical recess in the housing of the quick-action cylinder. For this reason, the subject-matter of claim 1 is novel and inventive.

Said person skilled in the art will not find the characterizing features of claim 4 in the prior art either so that its subject-matter is novel and inventive. These inventions are new alternatives to the controlled

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/EP2004/003945

Box No. V

Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement

and centring guidance of a feed nipple into the recess of
the quick-action cylinder.

Claims 2-3, 5-13 and 16-18 are dependent on claim 1 or 4
so that their subject-matter is also novel and inventive.

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/EP2004/003945

Box No. VI Certain documents cited

1. Certain published documents (Rule 43bis.1 and 70.10)

Application No. Patent No.	Publication date (day/month/year)	Filing date (day/month/year)	Priority date (valid claim) (day/month/year)
EP-1 344 599-A	17.09.2003	12.02.2003	11.03.2002

2. Non-written disclosures (Rule 43bis.1 and 70.9)

Kind of non-written disclosure	Date of non-written disclosure (day/month/year)	Date of written disclosure referring to non-written disclosure (day/month/year)
--------------------------------	--	---

see Form 210

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of:

Box IV

The various inventions are:

1. Claims 1-13, 16-18:

Quick-action cylinder according to the preamble of claim 1, wherein the front side of the feed nipple has conical bevels which interact with an assigned conical recess or conical tip, inclined in the opposite direction, in the housing of the quick-action cylinder.

Achieved object: centring assignment between the feed nipple and the housing of the quick-action cylinder.

2. Claims 14-15:

Quick-action cylinder according to the preamble of claim 1, wherein a capturing device for mechanically coupling the feed nipple to a reciprocating piston is arranged between the feed nipple and said reciprocating piston which is arranged in the interior of the quick-action cylinder.

Achieved object: reliable guidance of the feed nipple through the quick-action cylinder.

3. Claims 19-22:

Quick-action cylinder having a locking means, brought about by spring-loaded balls, of a machine shaft which engages through the housing of the quick-action cylinder.

Achieved object: high-precision positioning and securement of a machine shaft.

The common subject-matter of the first and second

Supplemental Box

inventions is a quick-action cylinder according to the preamble of claim 1 for the controlled guidance of a feed nipple into the central receiving opening in the housing of the quick-action cylinder. Such a quick-action cylinder is not novel (see, for example, D1) so that the two inventions are not connected by a single common inventive idea.

The common subject-matter of the first and third inventions is a quick-action cylinder for locking a body such as a feed nipple or a shaft. Such a quick-action cylinder is not novel (see, for example, D1) so that the two inventions are not connected by a single common inventive idea.